

NISTTech

Metal-halide lamp with improved spectral output during warm-up

Abstract

A metal-halide lamp is described that exhibits superior lumen output and color during the normally extended warm-up phase of operation, thus overcoming one of the significant barriers to widespread application of energy-efficient metal-halide lamps. The improvement is achieved by the addition of one or more high vapor pressure metal-halide salts, such as GaB, InI, TlI, etc., to the lamp. This addition has the effect, through vapor phase complexation, of raising the vapor pressures of the metal-halides responsible for radiation production. This effect is particularly effective at temperatures achieved during warm-up.

Status of Availability

This invention is available for licensing exclusively or non-exclusively in any field of use.

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